

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-3. Cancelled.

4. (Currently Amended) ~~The start cartridge according to Claim 3, A start cartridge for use in a high frequency start plasma arc torch, the start cartridge providing separation and electrical isolation between an electrode and a tip in the plasma arc torch comprising:~~

a plurality of vent holes, wherein the vent holes further comprise comprising outer vent holes and inner vent holes such that a velocity of the gas is increased as the gas flows from the outer vent holes to the inner vent holes[.].

wherein the vent holes provide gas flow to cool the electrode.

4-7. Cancelled.

8. (Currently Amended) A set of consumables for use in a plurality of plasma arc torches, the set of consumables comprising at least one component adapted to be disposed between an anode body and a cathode body of the plasma arc torch, the component defining a dielectric standoff sized such that the set of consumables are operable under both contact start and high frequency start modes of the plasma arc torches.

9. (Original) The set of consumables according to Claim 8, wherein the consumables are selected from a group consisting of an electrode, a start cartridge, a gas distributor, a tip, a spring, and a shield cup.

10. (Original) A set of consumables for use in a plurality of plasma arc torches, the set of consumables comprising:

an electrode;

a tip; and

a gas distributor disposed between the electrode and the tip,

wherein the gas distributor is sized to provide a dielectric standoff such that the set of consumables are operable under both contact start and high frequency start modes of the plasma arc torches.

11. (Currently Amended) A contact start plasma arc torch modified for operation with a high frequency power supply, the contact start plasma arc torch comprising a dielectric standoff, the dielectric standoff adapted to be disposed between an anode body and a cathode body of the plasma arc torch and sized such that the contact start torch is operable under high frequency.

12. (Previously Presented) The contact start plasma arc torch according to Claim 11, wherein the dielectric standoff is disposed between components of a plasma arc apparatus selected from a group consisting of consumable components, a torch head, a torch handle, a torch lead, a connector, a power supply, and an adapter.

13. (Previously Presented) The contact start plasma arc torch according to Claim 11, wherein the dielectric standoff is disposed within components of a plasma arc apparatus selected from a group consisting of consumable components, a torch head, a torch handle, a torch lead, a connector, a power supply, and an adapter.

14. (Previously Presented) The contact start plasma arc torch according to Claim 11, wherein the dielectric standoff is disposed between the contact start plasma arc torch and an outside environment.

15. (Currently Amended) A method of operating a contact start plasma arc torch modified to operate under high frequency, the method comprising the step of providing sufficient dielectric standoff between an anode body and a cathode body of the plasma arc torch such that arcing only occurs between an electrode and a tip.

16. Cancelled.

17. (Currently Amended) A method of operating a contact start plasma arc torch in a high frequency mode comprising the step of installing consumable components between an anode body and a cathode body of the plasma arc torch, to provide sufficient dielectric at least one of the consumable components defining a dielectric standoff sized such that the contact start plasma arc torch is operable under the high frequency mode.

18. (New) A dual mode torch comprising:

a torch head defining a proximal end and a distal end;

a torch lead disposed at the proximal end of the torch head;

a torch handle disposed proximate the torch head and the torch lead; and

a set of consumable components disposed at the distal end of the torch

head,

wherein at least one of the torch head, the torch lead, the torch handle, and the set of consumable components comprises a dielectric standoff sized such that the dual mode torch is operable with both a high frequency power supply and a contact start power supply.

19. (New) A dual mode torch comprising a dielectric standoff disposed between an anode body and a cathode body of the plasma arc torch, the dielectric standoff sized such that the dual mode torch is operable with both a high frequency power supply and a contact start power supply.

20. (New) The dual mode torch according to Claim 19 further comprising at least one component selected from the group consisting of a torch head, a torch lead, a torch handle, consumable components, a connector, an adapter, and a power supply, wherein the dielectric standoff is disposed within the component.